Serial No. 10/539,939

Atty. Doc. No. 2002P06474WOUS

Amendments To The Claims:

Please amend the claims as shown.

1 - 18 (canceled)

19. (currently amended) A method for filling <u>a</u> material separations at a surface of a substrate or a layer, comprising:

filling the material separation by introducing further material with an electrolytic deposition process incorporating electrolytically with an eddy-current probe that generates positioned to generate mechanical excitations oscillations in the region around the material separation. to and being used in the region of the material separation.

- 20. (currently amended) The method as claimed in claim 19, wherein the substrate or the layer is electrically connected through an electrolyte to an electrode, substrate, or layer and the electrode is arranged in an electrolyte and a variable current is provided between the substrate and the electrode, can be varied over time.
- 21. (previously presented) The method as claimed in claim 20, wherein the current is pulsed.
- 22. (currently amended) The method as claimed in claim 20, wherein the <u>further</u> material includes first and second constituents and the current is varied in a repetitive manner so that deposition conditions are alternately more optimum for the first constituent and then more optimum for the second constituent. parameters of the current are matched to the electrolyte.
- 23. (previously presented) The method as claimed in claim 20, wherein at least one ultrasound probe is operated in the electrolyte.

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24. (previously presented) The method as claimed in claim 19, wherein the frequency of the eddy-current probe is varied during the method.

25. (currently amended) The method as claimed in claim 24, wherein the frequency is matched to a depth of penetration into the material separation is set by the frquency.

26. (currently amended) The method as claimed in claim 20, wherein the <u>further</u> <u>material electrolyte</u> includes material of a same type <u>as</u> to the material of the substrate or the layer.

27. (currently amended) The method as claimed in claim 20, wherein the <u>further</u> material electrolyte includes material of a <u>similar</u> type <u>similar</u> to the material of the substrate or the layer.

- 28. (previously presented) The method as claimed in claim 19, wherein the material separation is widened in a first method step.
- 29. (previously presented) The method as claimed in claim 19, wherein a current/voltage pulse is used for the electrolytic deposition, with both positive and negative current/voltage pulses being used.
- 30. (previously presented) The method as claimed in claim 19, wherein a plurality of repeated current/voltage pulses are combined in a sequence and used for the electrolytic deposition, the sequence of at least two different blocks being used, with a block comprising at least one current pulse.
- 31. (previously presented) The method as claimed in claim 30, wherein a block is determined by a number of current pulses, pulse duration, interpulse period, current intensity, and pulse shape.

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32. (previously presented) The method as claimed in claim 30, characterized in that a block is in each case matched to a constituent of an alloy, in order to boost the deposition of this

constituent of the alloy.

33. (currently amended) The method as claimed in claim 19, wherein the further

material includes constituents of an alloy of the type MCrAlY resulting in deposition of the alloy

wherein is deposited and M is an element selected from the group consisting of iron, cobalt and

nickel.

34. (previously presented) The method as claimed in claim 30, wherein gradients are

produced in the material composition within the material separation.

35. (previously presented) The method as claimed in claim 21, wherein a base current

is superimposed on the current pulses and/or the interpulse periods.

36-37. (canceled)

38. (new) The method of claim 32 wherein the varying of current in a repetitive manner

includes providing current pulses of varied duration and magnitude.

39. (new) The method of claim 38 wherein a base current is superimposed on the current

pulses and during periods between pulses.

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